MECHANISMS OF AGEING AND DEVELOPMENT

VOLUME CONTENTS

Volume 55 (1990)

Enhancement of anti-influenza cytotoxic T-lymphocyte activity in senescent mice by vaccination early in life	1
B.S. Bender, E. Tallman, M.P. Johnson and P.A. Small, Jr. (Gainesville, FL)	
Relationship of reproductive success and median longevity to food intake, in the captive female spider Frontinella pyramitela	9
R.P. Spencer (Farmington, CT) Biochemical, genetic and ultrastructural defects in a mitochondrial mutant	
(ER-3) of Neurospora crassa with senescence phenotype	15
Increased glycation and pigmentation of collagen in aged and young para-	
biotic rats and mice	39
Early kinase C dependent events in aging human diploid fibroblasts	49
H. Shigeoka and H.C. Yang (Torrance, CA)	
Effects of ethanol on microsomal drug metabolism in aging female rats. III. in	
vivo	61
L.E. Rikans and C.D. Snowden (Oklahoma City, OK)	
Effects of intermittent feeding upon body weight and lifespan in inbred mice:	
interaction of genotype and age	69
C.L. Goodrick, D.K. Ingram, M.A. Reynolds, J.R. Freeman and N. Cider	
(Baltimore, MD)	
Necessity of the assessment of health status in human immunogerontological	
studies: evaluation of the Senieur protocol	89
G.J. Ligthart, J.X. Corberand, H.G.M. Geertzen, A.F. Meinders, D.L.	
Knook and W. Hijmans (Leiden, Rijswijk and Amsterdam, The	
Netherlands and Toulouse, France)	
Accessory molecules and antigen requirements for young and aging cytotoxic	107
lymphocytes	107
L.J. Jenski (Indianpolis, IN)	
Protein carboxyl methylation and methyl ester turnover in density-fraction-	122
ated human erythrocytes	123
C.A. Ladino and C.M. O'Connor (Shrewsbury, MA)	

Age-related changes in the cholinergic components within the central nervous system II. Working memory impairment and its relation to hippocampal muscarinic receptors	139
Haifa, Israel)	
Lack of age-dependent changes in CO binding to cardiac mitochondrial cyto-	
chrome oxidase	151
H.J. Harmon (Stillwater, OK)	101
Cholesterol accumulation in plasma membrane and changes of membrane	
enzyme activity in Acholeplasma laidlawii cells during culture ageing	161
A.B. Kapitanov, V.F. Ivanova and V.G. Ladygina (Moscow, U.S.S.R.)	101
Age-related modifications of cytochrome C oxidase activity in discrete brain	
regions	171
D. Curti, M.C. Giangare, M.E. Redolfi, I. Fugaccia and G. Benzi (Pavia,	1/1
Italy)	
Abscorbic acid uptake by young and aged guinea pig lenses	181
J.E. Fleming, S. Choi and K.G. Bensch (Palo Alto and Stanford, CA)	101
Hepatic cytosolic glutathione S-transferase activities in ageing brown Norway	
rats — importance of sex differences and phenobarbital treatment for	
studies of ageing	189
S. Coecke, Y. Vandenberghe, A. Callaerts, W. Sonck, G. Verleye, C.F.A.	103
Van Bezooijen, A. Vercruysse and V. Rogiers (Brussels, Belgium and	
Rijswijk, The Netherlands)	
Influences of physical training on the functional changes of young and old red	
blood cells	199
K. Spodaryk, L. Berger and S. Hauke (Krakow and Warsaw, Poland)	.,,
Longitudinal Gompertzian analysis of amyotrophic lateral sclerosis mortality	
in the U.S., 1977—1986: evidence for an inherently susceptible population	
subset	207
J.E. Riggs (Morgantown, WV)	
Longitudinal Gompertzian analysis of Parkinson's disease mortality in the	
U.S., 1955-1986: The dramatic increase in overall mortality since 1980 is	
the natural consequence of deterministic mortality dynamics	221
J.E. Riggs (Morgantown, WV)	
Longitudinal Gompertzian analysis of stroke mortality in the U.S., 1951—	
1986: Declining stroke mortality is the natural consequence of competitive	224
deterministic mortality dynamics	235
J.E. Riggs (Morgantown, WV) Tumor necrosis factor reduces lifespan of human endothelial cells in vitro	245
Y. Shimada, H. Ito, K. Kaji and M. Fukuda (Tokyo, Japan)	243
Periodic clustering of human disease-specific mortality distributions by shape	
and time position, and a new integer-based law of mortality	255
D.A. Juckett and B. Rosenberg (Holt and East Lansing, MI)	
Author Index Volume 55	293
Subject Index Volume 55	295
Contents Volume 55	299

